

About Identifying Plants

Line drawings were used for this guide to highlight distinguishing features of plants. This is important in the arrow shaped leaves of so many wetland area plants. This book does not come close to identifying all of the wild flowers, grasses, sedges, shrubs, or trees you may see, only focusing on those visitors have asked questions about.

This guide is divided by where plants grow in relation to water. Floating plants are free rooted in water, and do not root in soil at all. Emergent plants begin under water and grow above the water surface. They may be in the same area, depending on the water level, as the edge plants. Edge plants may grow in the water when the water level is high, or in dry ground. They are the most flexible in the amount of flooding they will tolerate. Dry land plants, in this book, are those that may be near water, but do not often grow in a regularly flooded area.

Color and leaf shape and size vary widely even on the same plant. Distinguishing characteristics are the flowers, veins, leaf arrangement, or specialized plant parts such as the ochrea in the Polygonaceae family.

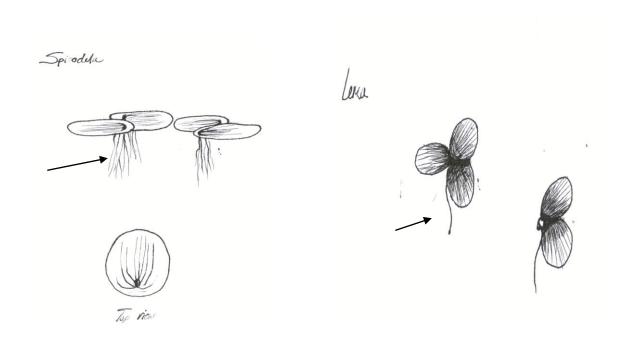
Plants don't keep calendar schedules. Early spring can be the end of February to late March. Spring can be March to the end of May. Summer can be mid-May to the end of September.

This book will start beginners in identifying plants. A good way to improve your skill is to take a plant whose name you know, and follow the key in a taxonomy book until you reach the name. Not all books have good keys, so check with a university on good ones for your area. Doing this with many known plants will help you learn to use that book's key. Authors vary in what is soft, short, narrow, and scaly. Keying out plants you already know will help you learn what that particular author means by these terms. Most books depend on flowers for identification and flowers are not always available. Looking at the same plants through the year is good practice to master identification.

Identifying plants can be a fun puzzle to solve. Enjoy yourself.

Floating Plants

There are three small floating plants without roots in soil growing in the ponds. Two are commonly called duckweed, the *Spirodela* with several roots per joint, and the *Lemna* with one root per joint. *Azolla* is actually a fern and turns red in fall.



Lemnacaea family have distinct oval leaves and roots suspended in the water.

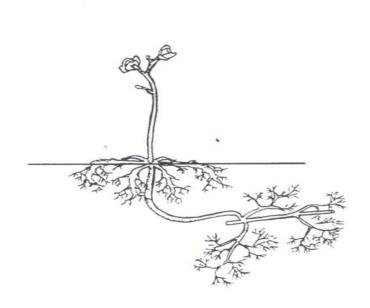


Azolla shows up mid-summer with tiny leaves on branching stems.

Both groups may be pushed aside by water meal, a tinier, more aggressive plant that quickly covers a pond in a bright, light green mass.

Floating Plants

Utricularia Bladderweed



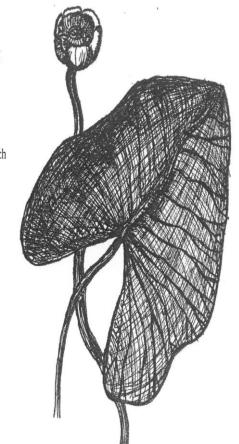
This plant forms a mat of tiny roots across the ponds through spring and may bloom in late summer with yellow, pea like flowers. It is special for the root system of tiny sacks that, when they come in contact with insect larvae, open up, pull them in, and eat them.

Art courtesy of University of Florida

Nuphar advena: Nuphar

Leaves may be erect with a 45 degree notch (Nuphar advena) or floating (Nuphar variegatum)

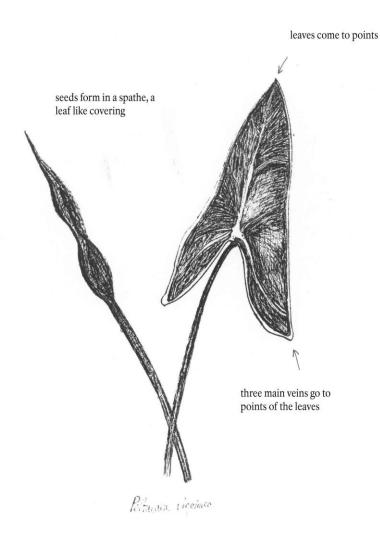
Nuphar advena (Spatterdock)



Nuphar has a yellow flower that resembles both lotus and waterlily flowers. In fact, it may be a common ancestor. This is an ancient species. The leaves are often underwater at high tide. It is host to a leaf minor insect that riddles the leaves each summer. Then the insect dies and the plant recovers.

Leaves are variable, arrow or heart shaped. The park is in the range for two different types of *Nuphar*, one with floating leaves, and one with erect. *Nuphar advena* is commonly seen in the marsh.

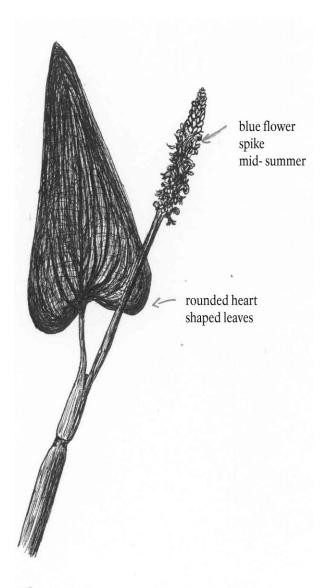
Peltandra virginica: Arrow arum



This plant is seldom noticed in the park. It has no showy flowers to draw attention to itself.

Pontederia cordata: Pickerel

Common throughout the ponds and marsh. Note the elongated heart shaped leaves that make this plant different from *Sagittaria* or *Peltandra*. The elongated leaves distinguish it from *Saururus*. Also unlike *Saururus*, the leaves come from a central location in the mud, not along a plant stem. In mid-summer this plant will have a conspicuous blue flower spike.

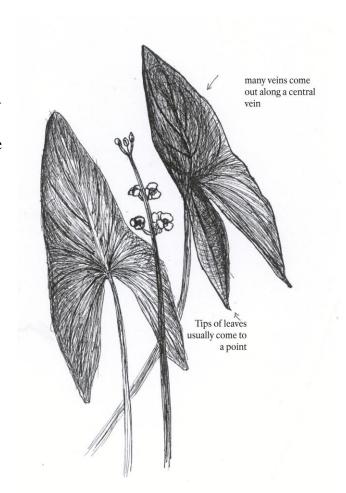


Portedoria cordata

Sagittaria latifolia: Arrow head

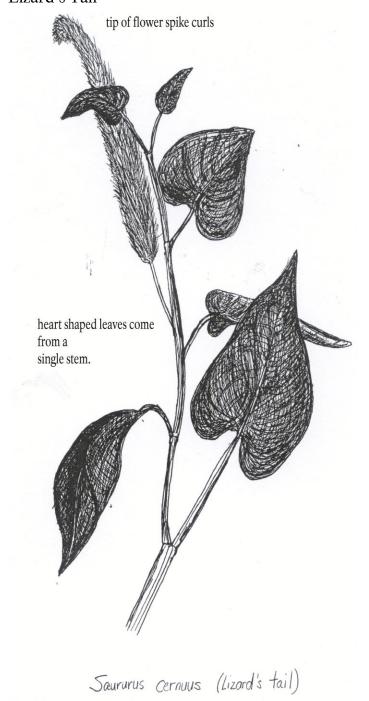
Saggittaria latifolia is one of many arrow leafed plants in the park. This one has white flowers in late summer.

The leaves come to three points. They are not normally rounded. The leaves have veins radiating to the edges of the leaves from a central vein.



Sagittaria latifolia

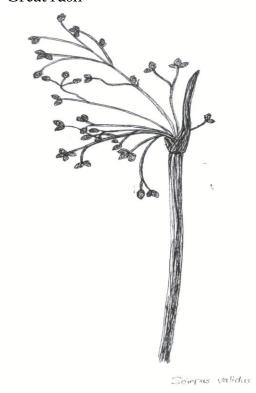
Saururus cernuus: Lizard's Tail



Dark green heart shaped leaves emerge in spring. By early summer the white flowers curl from the tops of the plants.

Look for this plant in shallow water at the edges of ponds and the marsh.

Scirpus validus: Great rush

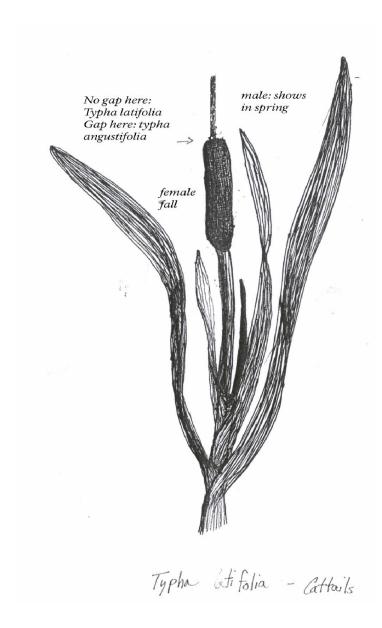


Different authors give two different species, one with an easily crushed stem (*S. validus*); one with a more rigid stem (*S. acutus*).

Look for a green or brown cluster of flowers coming from the top of a single stem. A sheath or blade may be present at the bottom of the plant.

Scirpus grows in shallow water near the edge of ponds or the marsh.

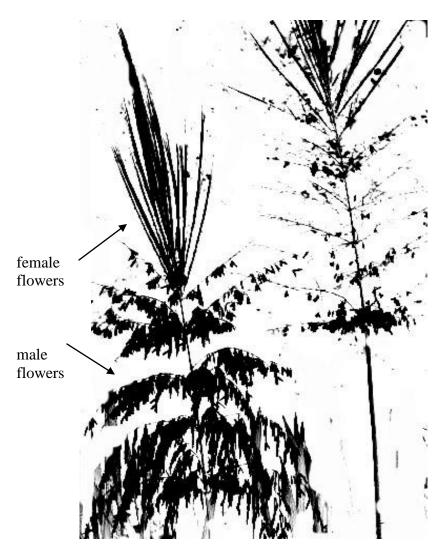
Typha latifolia: Cattail



Typha latifolia has larger leaves and heads than Typha angustifolia. They can also be distinguished from each other by the distance between male and female flowers. Typha latifolia has the male flowers right next to the female flowers. In the Typha angustifolia there is a gap between male and female flowers.

In spring, yellow staminate flowers are largest. It is in fall that the brown female cat tail part becomes showy as seeds develop. The one shown to the left is a fall plant.

Zizania aquatica:



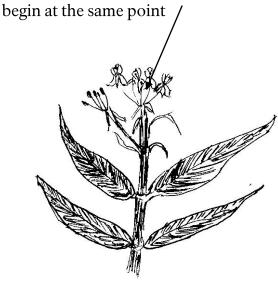
This large member of the grass family blooms in late summer, usually August.

Male flowers will be noticed first (plant on left) and can be confused with the rice grains that will form later in the year from the spike of female flowers (plant on right) at the top of the flower head. The flower spikes are green. Birds have usually eaten the rice before it turns the characteristic dark brown.

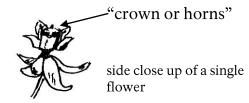
This park is on the southern most range of this northern species. Extensive patches used to grow along the Anacostia River. Now it can be found in isolated patches along the river and in the marsh. Samples are planted in the ponds.

Asclepias incarnata: Swamp milkweed

All of the flowers in a cluster



Asclepias incarnate like other milkweed has a complicated flower with two sets of petals and a "crown" or "horns" that come from the top set of petals and may arch over the stamens and pistils.



From the top, the upper petals come from between the lower petals. The flowers are light lavender and bloom in mid to late summer. Leaves are opposite with a center vein and side veins that point up running along the center stem.

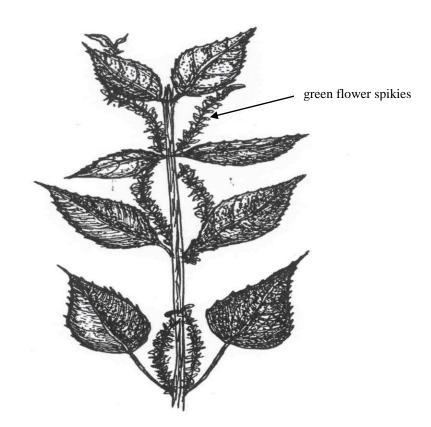


Looking from the top of a single flower.

A white ring of stamens is in the center with 5 horns curving over the ring from the center of 5 petals. Below them are another set of 5 petals with sepals hidden under the downward curving petals. This complicated flower structure makes milkweeds hard to pollinate so there are few seed pods for the numbers of flowers.

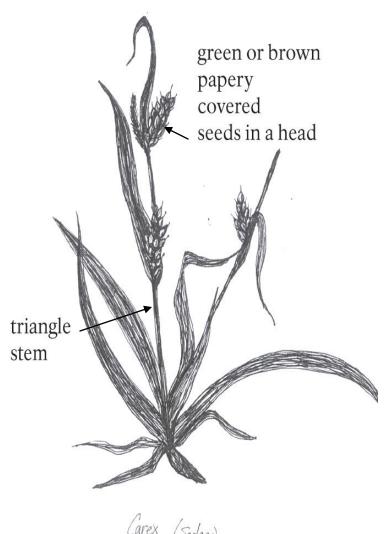
Boehmeria cylindrica: False nettle

Boehmeria cylindrica has inconspicuous spikes of green flowers coming out of the joints of leaves and stems. It grows about a foot high with opposite, pointed, egg shaped leaves. Unlike stinging nettle, this wetland plant won't sting.



Boehneria cylindrica False Nettle

Carex lurida: Sedge



Carex lurida looks like it would be thorny, but those spines are part of a papery sack that covers the seeds. Look for a grass like leaves with the inflated seed head clusters. The stems, characteristic of sedges, are triangular shaped, not round.

Cephalanthus occidentalis: Button bush

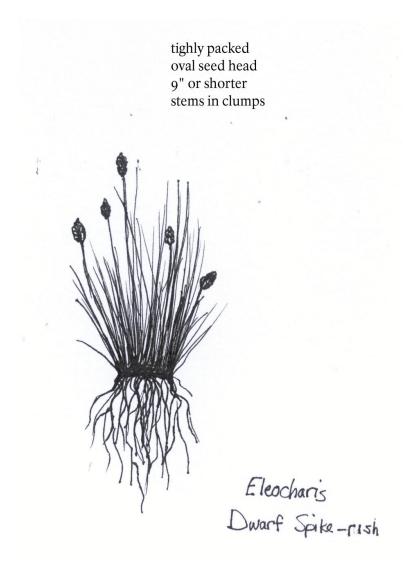


white ball of small flowers

Cephalanthus occidentalis is a medium sized woody shrub with opposite leaves and, in mid summer, white flowers clustered on balls. It is host to a variety of butterflies, bees and caterpillars. In the fall the seed ball looks like a round button. It is often parasitized by binder weed which weakens it.

Cephalanthus occidentalis Coruna button Gush

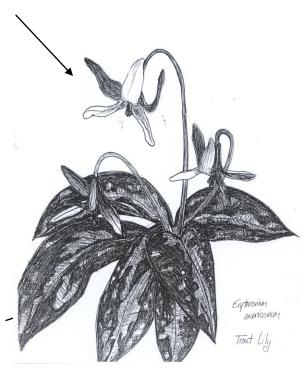
Eleocharis parvula: Dwarf Spike - rush



Eleocharis looks like clumps of fine blade grass. Look for the seed heads. Grows along ponds and may have had seed heads cut off.

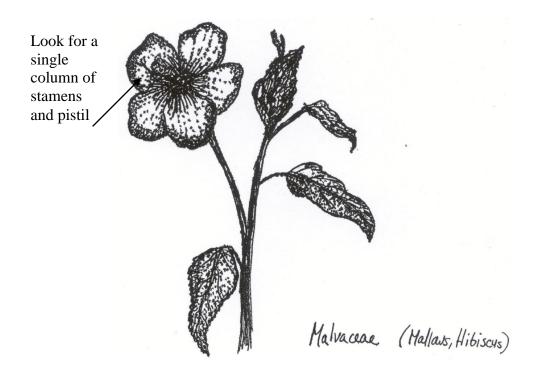
Erythronium americanum: Trout lily

yellow interior, brown exterior



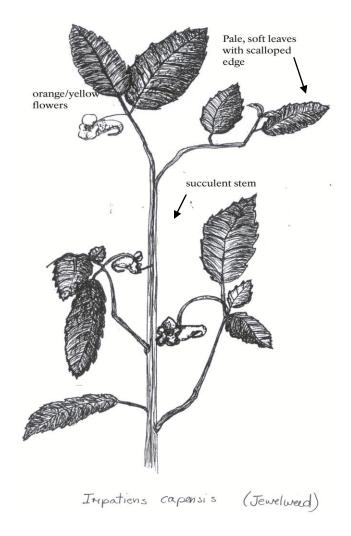
Erythronium americanum likes wet areas, blooms in April with a yellow lily flower only an inch long. The distinctive green leaves with chocolate spots will often be gone by the end of May. The one inch flower appears in spring.

Hibiscus moscheutos: Crimson – eyed mallow and swamp mallow



There are two forms of the *Hibiscus moscheutos* in the park. One is white with a red center; the other is pink with a red center. There are also cultivars of the family that are a deep rose red. All members of the *Malvacea* family have a characteristic style with 5 stigmas and attached stamens forming a single column in the flower. The woody capsules form in fall starting green then splitting into a star like shape as they turn brown. This is a woody plant that dies back to the ground each winter but old stems and capsules can be seen in the marsh in winter.

*Impatiens capensis:*Jewel weed/Touch Me Not



Impatiens capensis is one of the first sprouts to come up in damp places each spring. Late in summer flowers appear. These are followed by seed pods that burst when touched, hence the common name.

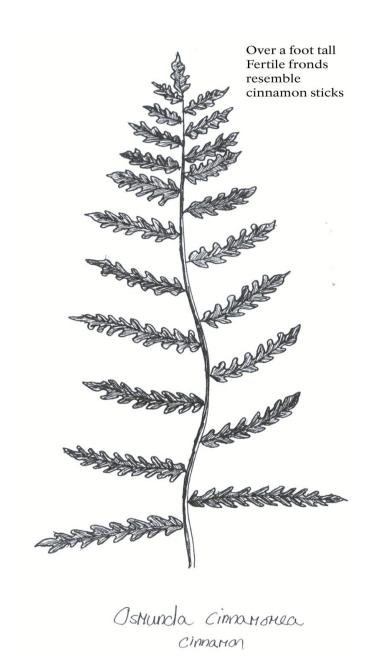
Juncus effusus: Soft rush



Juncus effusus is commonly seen along the edge of ponds or the marsh. The green or brown flowers seem to come from the middle of the stem, but feeling the stem one discovers that the stem ends with the flower, and a stem like bract covers the stem and extends above the flower.

Osmunda cinnamomea: Cinnamon fern

Osmunda cinnamomea looks like lady ferns but is taller. Look for the fertile fronds that are as tall as the sterile fronds, but cinnamon colored and form a tight column.



Osmunda regalis: Royal fern



Osmunda regalis is a tall fern with oval leaflets. The fertile parts of the fronds are at the tips of some fronds. In the spring, the fiddleheads look like curled asparagus.

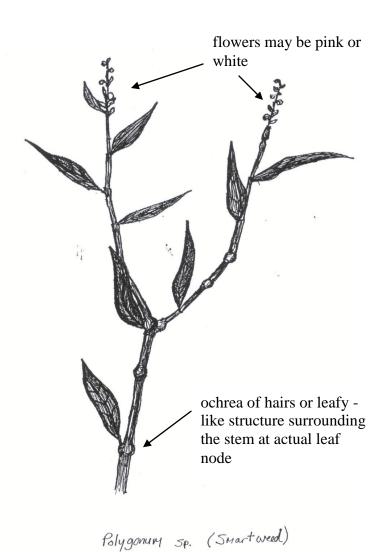
Osmunda regalis

Polygonum sp: Smartweeds

There are several species of smartweeds in the park, and several members of the *Polygonaceae* family, including the invasive mile- a- minute weed. They grow at the edge of water, are able to handle some inundation, and grow on dry soil. Look for the characteristic ochrea, a specialized leaf. This ochrea may take the form of a ring of hair like structures, or be green and leafy, but it is always



around the joint where a leaf comes out of the stem as shown to the left.

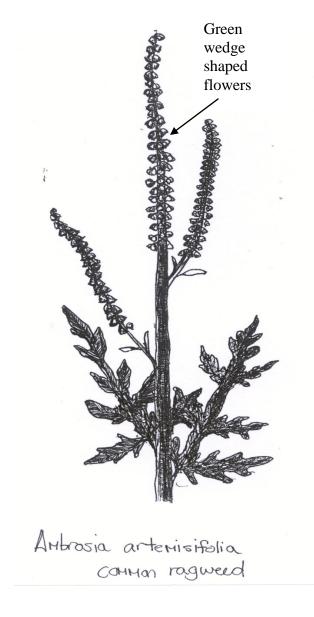


Taxodium distichum: Bald Cypress



This majestic tree has rows of delicate soft needles that come out each spring, and turn rusty brown in fall before falling off. The trunk is flared at the base and covered with shredded looking bark. It may have knees (bark covered woody projections from the root) coming up from the root system. These wooden conical knobs may hold soil for the trees, or there may be another reason for them, but they are also a distinguishing feature.

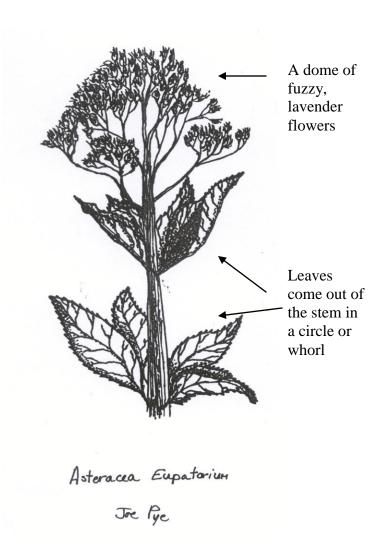
Ambrosia artemisiifolia: Common ragweed



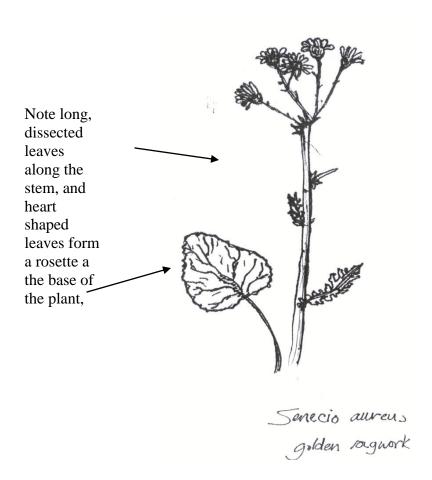
Ambrosia artemisiifolia is an inconspicuous flower with leaves similar to those of the chrysanthemum to which it is distantly related. The green flower spikes form in late summer and are mostly pollen.

Eupatorium fistulosum: Joe Pye

Eupatorium fistulosum is one of many similar, related plants called Joe Pye. E fistulosum has leaves that narrow at the base where they join the stem, and a hollow stem. All of the Joe Pye have leaves in whorls (all leaves come out of the stem at the same horizontal plane moving up the stem). Will bloom mid to late summer.

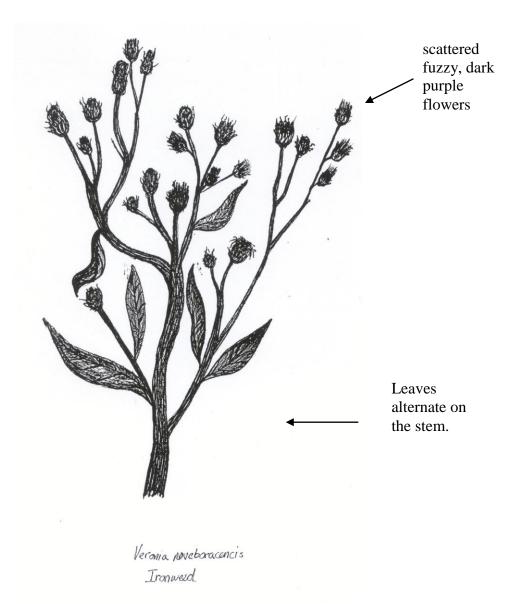


Senecio aureus: Golden ragwort



Senecio aureus is the first of the many aster family plants to bloom. In April, look for its bright yellow flowers on sandy soils near the remnant marsh.

Veronia noveboracensis: New York Iron Weed



Veronia noveboracensis is a member of the aster family with fuzzy purple flowers in an open pattern at the top of the plant. Blooms in mid to late summer. The narrow rough leaves are alternate on the stem (one on one side, and further up on the other side of the stem, another leaf).

Viola sp.: Violet



Five unevenly spaced petals

Violets can be seen in the grass and along the edges of the woods here in April and May. They may have purple, lavender, blue, and white flowers. All of those in the park share the heart shaped leaf.